Usablenet
TECHNICAL OVERVIEW

Introduction

Founded in 2000, Usablenet is the leader in mobile and multichannel technology and a pioneer in usability. From our roots in web accessibility and usability, Usablenet has developed into an Experience Platform providing clients with rapid deployment of Mobile sites, App, Tablet, Kiosk and Mobile Marketing Experiences. The platform has developed to enable any source (web sites, web services/APIs) to be injected into server side generated HTML5 experiences that can be browser based, web app based or used within a native App. The Usablenet Platform-as-a-Service (PaaS) is available to clients as a fully managed service, with content control, or for internal client development. As part of its managed services offering, Usablenet offers clients mobile strategy consultation, UX research, interaction design (UX), development, project management, QA and on-going maintenance and support.

Customers

Usablenet has more than 400 customers worldwide, including Marks & Spencer, Aeropostale, Tesco, CVS Caremark, Hilton, Hyatt, Ritz-Carlton, Virgin, British Airways, Dell, FedEx, Royal Mail, Merck and Allianz. Usablenet is the partner many mid-market and large enterprise companies trust to take them mobile because our mobile and multi-channel solutions require few client-side resources to create and deliver sites and experiences.

The Usablenet platform supports over 500 mobile implementations, delivering more than 100 million pages per day across 220 countries. It consists of four world-wide data centers which provide geographic redundancy and scalability, allowing us to comfortably support traffic volumes over peak periods such as Black Friday or Boxing Day.

Notable Awards:

Top 10 Most Innovative in Mobile by Fast Company.
One of 2013 Forbes America’s Most Promising Companies
Top 50 US Tech Companies by Inc.
#130 in Deloitte Technology 500
Webby Award for best shopping and best mobile experience for Walgreens.
Ranked as “Visionary” in Gartner 2012 Magic Quadrant for Mobile Application Development

Offices

HEADQUARTERS
New York, NY

NORTHERN EUROPE
London, UK

WEST COAST
Los Angeles, CA

SOUTHERN EUROPE
Udine, Italy

250 Employees:

- 100 Engineers & Developers
- 50 Sales
- 70 Delivery Services
- 30 Corporate

Usablenet
28 W. 23RD ST. 6TH FLOOR
NEW YORK, NY 10010
E. CONTACT@USABLNET.COM
TWITTER: @USABLNET

+1.212.965.5388
WWW.USABLNET.COM
Usablenet offers a scalable, multi-tenant PaaS-based service with robust staging and preview capabilities, called U-Experience. U-Experience performs like a user experience platform (UXP) for developing and delivering unique experiences optimized for a wide variety of devices and operating systems.

Usablenet’s U-Experience platform provides an integrated collection of technologies and methodologies to design, develop and deliver user interface/presentation capabilities for a wide variety of devices through the combination of Agile Web Services, HTML5, U-FX JavaScript (and J-Query-based libraries). These are available for internal client development as part of U-Develop (Developer License of Usablenet Platform) that allows clients to bring the Platform in-house to be used by their own development teams. Usablenet has dedicated user experience and mobile development teams that can create the final mobile or multi-channel experience, or work with a client team to share the projects.

The platform performs a number of actions when converting original website or web applications into an Agile Web Services, and many of these are patented technics. They include emulating client side JavaScript and Ajax to server-side JavaScript, removing the need for the mobile browser to download and execute JavaScript needed to use the original source. Usablenet’s platform provides developers with a reusable library of CSS from previous deployments for re-use or to customize. Sites are built using unique UI/UX (not template-based).

The platform has adaptive capabilities to optimize layouts, images and other assets to fit the wide range of mobile and tablet devices. Usablenet’s platform is integrated with CDN networks for images and other standard cache-able data. By default the platform does not cache content. Usablenet is PCI-DSS compliant and the hosting centers are SSAE16 / ISO audited and certified. Usablenet is audited annually by an independent third party auditor to PCI DSS and HIPAA/HITECH.

At the heart of Usablenet’s architecture lies our Agile Web Services, which allow clients to mashup data and content from a variety of sources including existing platform API’s, web-services and existing desktop websites. Usablenet’s platform can output Agile Web Service (restful based service) from any input, including non-structured sources such as a website or web applications retaining key aspects as session, cookies and security.

Usablenet also has in-house Native app development for smartphones and tablets, and has invested in both native and hybrid app development capabilities for all major OS’s including iOS, Windows, Bada and BlackBerry.

Frequently Asked Questions

Usablenet partners with a range of companies in technology, payment, performance and content management. Usablenet relies on best of breed technology partners to provide reporting, analytics and A/B testing capabilities. Primary partners are Google, Amazon, Akamai, Keynote and Adobe. Usablenet has partnerships in place with a broad cross-section of 3rd parties to add social, localization and personalization elements to the experiences that can be developed for clients.

- **Performance (CDN):**
  - Akamai Aqua Ion. Clients can access Usablenet within Akamai’s App Accelerator administration tool.
  - Amazon CDN through Usablenet’s partnership with Amazon Web Services.

- **Performance Monitoring:** Keynote, Gomez and Alertsite for site performance monitoring, testing and reporting.

- **Optimization testing (mobile websites and apps):** Tealeaf

- **Analytics:** Adobe Analytics, Google and WebTrends for mobile analytics (client side)

- **Social, local and personalization:** A range of partners including Apple, Certona, Xtify, Bazaarvoice, Dynmark, Gigya, Ooyala, MotionPoint and ForeSee.
U-Develop

Access to the Usablenet Platform is provided under the U-Develop license and program. The Usablenet platform offers a powerful, secure cloud-based multi-channel development platform. Clients can develop, package and instantaneously deploy any mobile or multi-channel experience without any client infrastructure. Client development and delivery teams such as QA and Project management can be distributed throughout the world and all access the same secure cloud based environments.

The Usablenet platform architecture provides an integrated secure development, deployment and production architecture that lets clients concentrate on building solutions, rather than thinking about SDKs, software, servers and other infrastructure. Mobile sites and experiences built and deployed via the U-Develop platform benefit from the worldwide infrastructure and scale of the Usablenet Cloud.

With U-Develop, clients access the Developer Environment directly, with a Staging and Production environment. Within this DE environment clients will have access to the latest Usablenet technologies organized in 3 key areas; Web Services and API Module for consuming and creating (Agile) Web Services; Creating Experiences Module with HTML 5 and U-FX framework; Controlling Experiences Module with U-Control.

U-Develop includes the Usablenet development environment, the Usablenet Developer Kit, programs and utilities to test or compile developments; the Usablenet application program interface, JavaScript and Eclipse plug-ins, access to the Usablenet hosting environment via web-based application; Usablenet’s web-based administration tool; electronic and written documentation including training and user manuals etc.

Mobile Publishing and Content Control (U-Control)

U-Control enables clients’ non-technical business and marketing teams to create and publish mobile and tablet promotions and control every aspect of the multi-channel campaign, with no need for on-going developer resources. Within the U-experience platform every experience can be assigned dedicated control areas and even complete micro sites. The functional areas are set up by the original development teams and then accessed via U-Control. Marketers can plan, customize and change content on the mobile site and for mobile campaigns, promotions and events. The platform supports the ability to launch microsites and local event content on mobile, without the need for design or developer resources. Using a simple web based interface, client users can add visual assets and links to content. Changes in U-Control reflect immediately on the mobile site and alleviate internal resource limitations by giving marketers and e-commerce direct and immediate control over content, promotions, and messaging. With U-Control, brands can aggregate and easily assemble images, links to content, and social feeds to support their web and digital presence. The U-Control console allows users to make changes and preview them before publishing to production.

Q1. How does the platform support mobile commerce, checkout and payment?

The platform provides the flexibility for clients to inherit existing commerce capabilities from their existing desktop eCommerce site while allowing augmentation of capabilities directly within the platform where required. Usablenet supports all product catalogs and shopping cart options. These are either inherited from backend systems (eCommerce/POS platform) or configured and managed independently within the solution. The checkout process is configurable and customizable in the admin tools. The shopping cart persists across touch points. The checkout process is streamlined by applying UX best practices such as removing extra steps and pages, consolidating information input stages, offering customer account access and secure information entry for quick checkout. The checkout process supports multiple payment options (e.g. credit / debit card, Google Wallet, PayPal, MasterCard MasterPass, etc.) including international payment and multiple currencies.

Q2. What are Usablenet’s capabilities for in-store kiosk development and mobile POS?

Usablenet has a proven install base of in-store touch points with tablet based kiosks, associate facing clientelling apps and large format touchscreen kiosks for cross-channel discovery and ordering. They can be supported via web experience or apps depending on client wishes. Usablenet has active relationships with, and have implemented on, a variety of kiosk vendors including NCR, Polytouch, 3M, IBM Anyplace, and Retec. For mobile POS, the Usablenet platform can create solutions that fit with existing client POS hardware. The Usablenet platform can communicate with existing web services or APIs, or convert features that are available on the current original website to create web services.
Q3. Does Usablenet have analytics and research-based design methodologies to support the design of best-in-class customer experiences?

Usablenet’s global UX Group leads and executes all the practices that form an integral part of user-centered experiences, including experts in UX Research, analytic/strategy and creative. Usablenet offers a set of testing methodologies and UX team that is integrated into the implementation process. Through its UXR team, Usablenet manages the ongoing optimization of the mobile customer experiences for clients.

Q4. Can Usablenet employ responsive design principles to deliver optimized web experiences to different viewports from a single codebase?

Usablenet’s platform is adaptive, offering an approach that is vastly more flexible than optimizing via responsive design. However, Usablenet’s HTML 5 framework (UFX) can be used to generate responsive design from the common web service provided by the platform (if the use case benefits from responsive design, such as for content-heavy sites). The platform supports mapping multiple desktop pages to one mobile tablet/page and breaking up one desktop page into a multi-page experience on mobile/tablet. There is no limit to what can be done at the presentation layer.

Q5. How long does a typical implementation take?

Implementation times vary, but a typical implementation is 16 weeks. Every mobile site is custom development (no templates), using Usablenet resources. Depending on the experience the client wants to create, implementing an additional touch point can vary from 6 - 10+ weeks.

Q6. How does Usablenet handle changes made to the desktop site?

Usablenet has a change management process in place that covers changes happening to the desktop site. All clients have a dedicated project manager for ongoing support. For BAU changes, the project manager will engage the Usablenet delivery team to support the change. After the development work is done, the change will be available on test environment for QA. If the planned change is significant in its potential impact, such as changes to the UI or specific user journeys, a Solutions Engineer will review and initiate a project scope change to determine the extent of additional resources that will be required.

Q7. What is Usablenet’s quality assurance procedure?

Every project is in QA before release. Our process also includes UAT by the client. Usablenet uses automated test processes that run periodically during BAU to test key user journeys.

Q8. What support, services, and resources are offered post-launch on a professional services basis?

Usablenet’s managed service includes on-site support, change management and help-desk. Problem resolution time depends on the problem. Usablenet’s model is a high-touch, high-support model. All clients have a dedicated account manager for ongoing support, expertise and relationship management. Usablenet also provides 24x7 monitoring and network operations support to ensure customer service performance, uptime and other SLA are adhered to.

Q9. What is your approach to security and certification? Is Usablenet PCI/DSS and SAS 70 audited and certified?

Usablenet is PCI-DSS compliant and the hosting centers are SSAE16 / ISO audited and certified. Usablenet is audited annually by an independent third party auditor to PCI DSS and HIPAA/HITECH. Usablenet hosting centers are certified as SAS70 Type II, or SSAE16 Type II, or ISO/IEC 27001:2005. It must also be noted that Usablenet does not store, cache, database or merchant any client or customer data.

Q10. Do Usablenet sites require redirection to a separate domain or sub-domain?

Usablenet’s product requires redirection. Redirects can be handled by Akamai and other DNS/CDN partners. Usablenet provides sample configuration and code covering common webserver and programming languages. Clients have complete control over re-directs and re-direct logic.

Q11. How does the Usablenet platform support detection of user devices and their feature capabilities?

Usablenet integrates with 3rd party database and augments with additional proprietary rules based on device capabilities. Usablenet regularly tests the devices that make up 95% of the user base in each target country supported. The speed with which updates and new devices are added in the library is based on Usablenet’s partner Atlas Device. The Usablenet mobile platform generates a new dynamic mobile page on-the-fly that combines sources available (Web Services, APIs, Web Sites, XML) based on the device that is accessing the mobile site. This allows for any mobile device to be supported worldwide.

Q12. What programming languages does Usablenet use that enable clients to develop native apps independently?

Usablenet develops native code for each application, which clients can access directly. If a client would like to create an application leveraging Usablenet’s platform, we will provide Agile Web Services to leverage the capabilities of the platform. Our Agile Web Services support a continuous session to connect with any feature on the client’s full website or any openly accessible API.

For more information about Usablenet’s products, services and experience, please email us at: ask@usablenet.com